

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
CHESTER COUNTY GROUND-WATER-QUALITY MONITORING PROGRAM**

Ground-water samples were collected from selected wells in Chester County in August through November 2003 as part of the Chester County Ground-Water-Quality Monitoring Program. The monitoring program began in 1980 with objectives that include providing data on ground-water quality (1) near suspected sources of contamination; (2) in areas of different land use or different underlying geology; (3) for specific contaminants or constituents countywide; and (4) in watersheds as part of a regional assessment. Samples typically are collected each summer. In water years 2003 and 2004, 5 of a total of 17 wells sampled in the county were in the Susquehanna River Basin. Other data for this project can be found in the annual Water Data Report PA-04-1 (Delaware River Basin). For additional information, contact Lisa Senior at the USGS Pennsylvania Water Science Center, Exton Office, Suite 116, 770 Pennsylvania Drive, Exton, PA 19341; 610-647-9008; (email lasenior@usgs.gov).

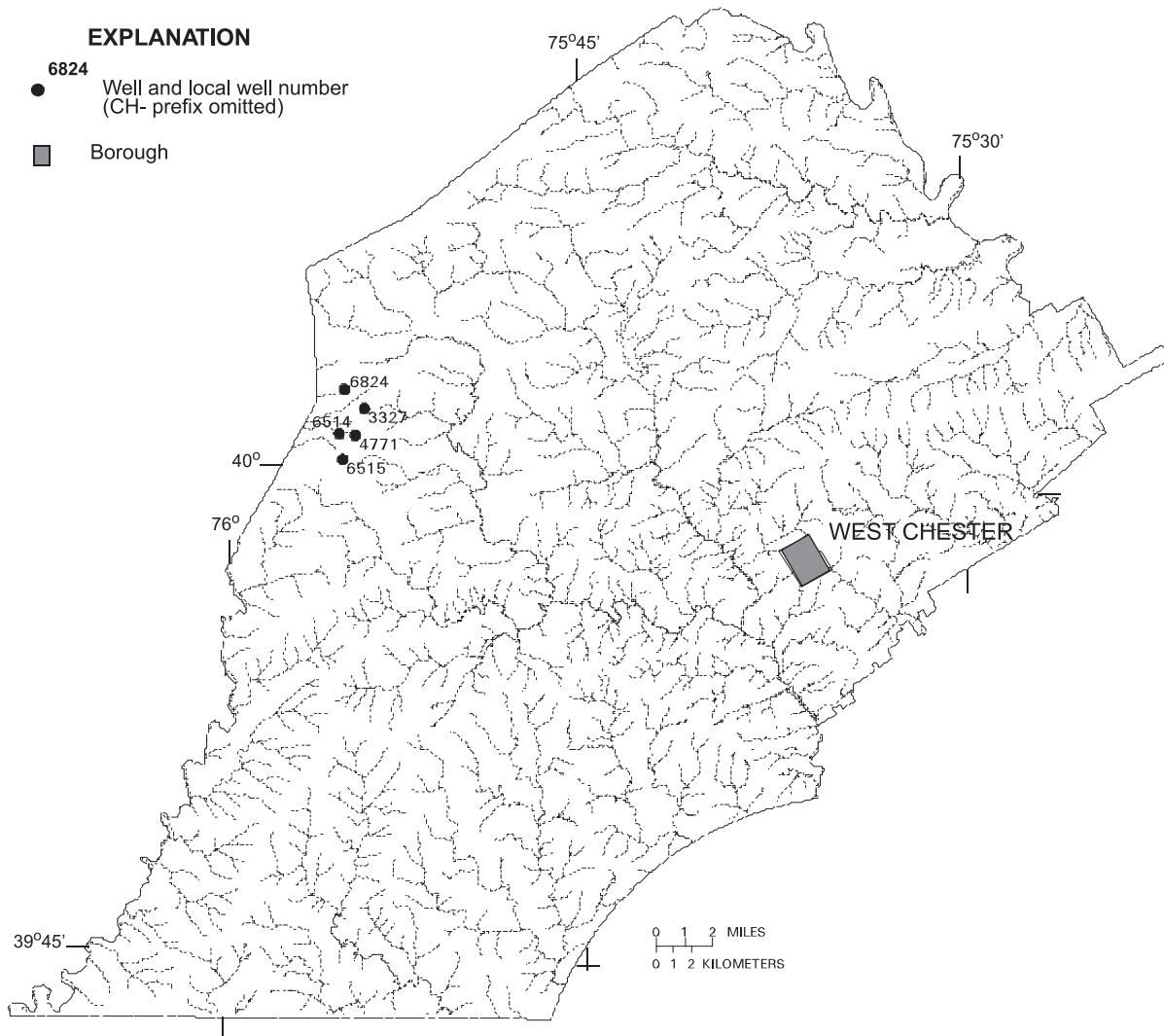


Figure 13.--Locations of selected wells sampled as part of the Chester County ground-water-quality monitoring program.

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**REMARKS.**--Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods. Replicate samples at one well (CH-3327) were collected for quality assurance (QA) purposes.

**WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2004**

Local well number	QA sample type	Station number	Latitude	Longitude	Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)
CH 3327	replicate	400212075541101	40 02 12 N	075 54 11 W	10-28-03	1250	1028	80020	195	--
CH 3327	replicate	400212075541101	40 02 12 N	075 54 11 W	10-28-03	1251	1028	80020	195	--
CH 4771		400122075543201	40 01 22 N	075 54 32 W	11-04-03	1050	1028	80020	210	66.41
CH 6514		400126075551001	40 01 25 N	075 55 09 W	08-11-03	0920	1028	80020	130	40.91
CH 6515		400037075550101	40 00 37 N	075 55 00 W	08-12-03	1300	1028	80020	100	27.01
CH 6824		400247075545901	40 02 47 N	075 54 59 W	10-30-03	1040	1028	80020	--	23.90

Local well number	Date	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specific conductance, wat unfltrd, µS/cm (90095)	Specific conductance, wat unfltrd, µS/cm (00095)
CH 3327	10-28-03	908	4.7	64	737	9.7	93	4.5	4.6	78	81
CH 3327	10-28-03	908	4.7	64	737	9.7	93	4.5	4.6	76	81
CH 4771	11-04-03	785	2.5	63	740	6.0	56	5.7	E6.5	116	114
CH 6514	08-11-03	680	3.8	--	740	8.4	83	5.2	5.2	110	109
CH 6515	08-12-03	810	1.0	--	741	8.4	88	4.7	5.0	472	479
CH 6824	10-30-03	840	5.2	60	746	9.3	88	5.4	E6.0	203	207

Local well number	Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)
CH 3327	10-28-03	14.0	12.1	1.74	3.32	2.02	2.66	4.99	<.2	6.8	20.5
CH 3327	10-28-03	14.0	12.1	1.70	3.26	1.97	2.62	4.89	<.2	6.8	22.1
CH 4771	11-04-03	17.5	12.2	1.05	2.11	2.47	17.4	16.5	<.2	10.7	.9
CH 6514	08-11-03	24.0	13.7	3.95	6.42	2.92	2.69	8.03	<.2	12.8	7.0
CH 6515	08-12-03	28.0	16.5	9.96	10.0	2.28	62.7	113	<.2	8.7	24.7
CH 6824	10-30-03	11.0	12.8	5.27	4.80	2.84	23.6	42.9	<.2	11.3	4.2

Local well number	Date	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenic, water, fltrd, µg/L (01000)	Boron, water, fltrd, µg/L (01020)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recoverable, µg/L (01051)	Manganese, water, fltrd, µg/L (01056)
CH 3327	10-28-03	<.04	1.27	<.008	<.18	<.2	13	E5	1.66	1.51	65.2
CH 3327	10-28-03	<.04	1.27	<.008	<.18	<.2	14	E4	1.79	1.51	64.8
CH 4771	11-04-03	<.04	1.56	<.008	<.02	<.2	7.8	133	1.28	19.9	134
CH 6514	08-11-03	<.04	5.81	<.008	<.02	<.3	11	E4	2.10	3.84	6.8
CH 6515	08-12-03	<.04	4.13	<.008	<.02	<.3	55	285	3.80	3.69	49.9
CH 6824	10-30-03	<.04	3.12	<.008	E.01	<.2	18	E4	2.54	1.90	3.1

Local well number	Date	Gross alpha 30 day recount, wat unfltrd, Th-230, pCi/L (63016)	Gross alpha radioac 72 hr, wat unfltrd, Th-230, pCi/L (63014)	Gross beta 30 day recount, wat unfltrd, Cs-137, pCi/L (63017)	Gross beta radioac 72 hr, wat unfltrd, Cs-137, pCi/L (63015)	Pb-210, water, unfltrd, pCi/L (17501)	Rn-222 2-sigma, water, unfltrd, pCi/L (76002)	Rn-222, water, unfltrd, pCi/L (82303)
CH 3327	10-28-03	71	474	46	95	M	34	1180
CH 3327	10-28-03	60	436	41	95	M	33	1100
CH 4771	11-04-03	5	2	3	3	1	69	5300
CH 6514	08-11-03	M	1	4	3	1	57	3850
CH 6515	08-12-03	27	40	21	24	2	69	5340
CH 6824	10-30-03	12	22	5	5	3	120	15400